

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



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7-15-16
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Order Instituting Rulemaking to Enhance the
Role of Demand Response in Meeting the State's
Resource Planning Needs and Operational
Requirements.

Rulemaking 13-09-011
(Filed September 19, 2013)

**REPLY COMMENTS OF ENVIRONMENTAL DEFENSE FUND ON
ADMINISTRATIVE LAW JUDGE'S RULING REQUESTING RESPONSES TO
ADDITIONAL QUESTIONS IN REGARD TO 2018 AND BEYOND DEMAND
RESPONSE PROGRAMS**

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I. INTRODUCTION

Pursuant to the Ruling issued by Administrative Law Judge (ALJ) Hymes on May 20, 2016,¹ Environmental Defense Fund (EDF) submits the following reply comments. EDF agrees with several parties and the DR potential study that demand response (DR) is an integral part of building a clean, reliable grid.² In order to realize these benefits, there are a number of

¹ *Administrative Law Judge's Ruling Requesting Responses to Questions in Regard to 2018 and Beyond Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State's Resource Planning Needs and Operational Requirements, R. 13-09-011 (filed May 20, 2016).

² *See, e.g., Comments of the California Energy Storage Alliance on Administrative Law Judge's Ruling Requesting Responses to Additional Questions in Regard to 2018 and Beyond Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State's Resource Planning Needs and Operational Requirements, R. 13-09-011 at 4 (filed Jul. 1, 2016); *Southern California Edison Company's (U 338-E) Opening Comments to Administrative Law Judge's Ruling Requesting Responses to Additional Questions in Regard to 2018 and Beyond Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State's Resource Planning Needs and Operational Requirements, R. 13-09-011 at 2 (filed Jul. 1, 2016); *Pacific Gas and Electric Company's (U-39M) Responses to Questions in Administrative Law Judge Hymes' May 20, 2016 Ruling*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State's Resource Planning Needs and Operational Requirements, R. 13-09-011 at 2 (filed Jul. 1, 2016); *Clean Coalition Response to Administrative Law Judge's Ruling Requesting Responses to Additional Questions in Regard to 2018 and Beyond Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand

considerations that the California Public Utilities Commission (CPUC or Commission) will need to take into account in developing an inclusive DR market that enables California to meet important clean energy and climate goals while also maintaining a reliable grid. Accordingly, in these comments, EDF will address the following:

- The need for accurate, transparent price signals and a competitive market that includes third parties;
- The need for a transparent procurement mechanism that efficiently monetizes the benefits of DR;
- The need for increased data access and transparency in order to build a competitive market;
- The need to align incentives, including penalties for non-performance and prohibition of the routine use of fossil fuel powered DR resources; and
- The value of planning for the competitive procurement of DR when it is part of a portfolio that can provide multiple benefits.

II. DISCUSSION

A. *Any effective DR market needs to include transparent, accurate price signals and be structured to enable competition.*

In its opening comments, San Diego Gas & Electric (SDG&E) states, “in general, the CPUC should allow and approve rate designs that are fair, transparent, and provide accurate price signals to customers in this proceeding and the rate design proceedings.”³ Similarly, the California Energy Storage Alliance (CESA) posits that the Commission focus on “implementing appropriate price signals and incentives in the market to ensure that DR attributes

Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 2 (filed Jul. 1, 2016).

³ *Comments of San Diego Gas and Electric Company (U902E) on 2018 Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 16 (filed Jul. 1, 2016).

(e.g., accuracy, response time, firmness) are quantified and compensated for.”⁴ EDF agrees with these statements and similar sentiments from other parties.⁵ The potential for ability of DR to support the increased use of clean resources without curtailments is significant, but to spur the marketplace to produce DR, it must be appropriately recognized and compensated.

Relatedly, in order to facilitate DR in the market, the Commission needs to ensure a fair competitive venue (i.e., an even playing field) for investor-owned utilities (IOUs) and third party DR providers. EDF thus agrees with OhmConnect that “the Commission should put in place rules and infrastructure to facilitate a robust and competitive market for supply DR” and with Olivine that “it is important to ensure that there is a plethora of providers as well as technologies able to create viable business models within California.”⁶ However, EDF respectfully disagrees with the California Independent System Operator (CAISO) that the load serving entities and utility distribution companies are “best suited to fulfill Commission established supply and load modifying demand response goals” and “best suited to satisfy Commission demand response goals related to deferring or avoiding traditional distribution system upgrades.”⁷ The more

⁴ *Comments of the California Energy Storage Alliance on Administrative Law Judge’s Ruling Requesting Responses to Additional Questions in Regard to 2018 and Beyond Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 14-15 (filed Jul. 1, 2016).

⁵ *Responses of The Utility Reform Network to Questions Concerning Demand Response in 2018 and Beyond*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning needs and Operational Requirements, R. 13-09-011 at 27 (filed Jul. 1, 2016) (“TURN suggests that the Commission should ensure there is full transparency of prices paid under utility programs versus third party contracts”); *Comments of Olivine, Inc. in Response to Additional Questions in Regard to 2018 and Beyond Demand Response programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 6 (filed Jul. 1, 2016).

⁶ *Comments of Olivine, Inc. in Response to Additional Questions in Regard to 2018 and Beyond Demand Response programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning needs and Operational Requirements, R. 13-09-011 at 4 (filed Jul. 1, 2016); *Response of OhmConnect, Inc. to Administrative Law Judge’s Ruling Requesting Responses to Additional Questions in Regard to 2018 and Beyond Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 3 (filed Jul. 1, 2016).

⁷ *California Independent System Operator Corporation Response to Additional Questions in Regard to 2018 and Beyond Demand Response programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 4 (filed Jul. 1, 2016).

efficient means to procure DR involve market mechanisms that put a price on capabilities that DR can, in either isolation or as part of a portfolio, deliver in a cost competitive manner. In this context, EDF disagrees that the IOUs will be “best suited” to fulfill DR goals. With access to data, which EDF will discuss in Section C, third parties can and should be amongst the innovators competing to produce and sell DR into California energy markets.

B. The Commission should focus on transitioning to a more open and permanent procurement mechanism.

While SDG&E states that “all resources should compete on equal footing as part of an all-source RFO to procure the most cost-effective resources to meet a set goal,”⁸ EDF respectfully submits that an all-source request for offer (RFO) process is an inherently opaque process that leads to utility advantages, and inappropriately allows for utility control over DER deployment and rewards. Because it is often unclear how – or even if - third party providers win bids, it becomes difficult for third party providers to properly structure their bids. In addition, utilities can prioritize their own products rather than selecting the most innovative, cost-effective DR products. A better path forward would be to institute a procurement mechanism administered by an independent entity, as suggested by OhmConnect⁹ and Clean Coalition.¹⁰

⁸ *Comments of San Diego Gas and Electric Company (U902E) on 2018 Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 1 (filed Jul. 1, 2016).

⁹ *Response of OhmConnect, Inc. to Administrative Law Judge’s Ruling Requesting Responses to Additional Questions in Regard to 2018 and Beyond Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 6 (filed Jul. 1, 2016) (“because the utilities are presently the largest buyers and sellers of DR products, the Commission should require that an independent entity (e.g. the CAISO) administer the procurement mechanisms for DR products, rather than the utilities themselves”).

¹⁰ *Clean Coalition Response to Administrative Law Judge’s Ruling Requesting Responses to Additional Questions in Regard to 2018 and Beyond Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 5 (filed Jul. 1, 2016) (“the Clean Coalition notes the potential for a Distribution System Operator (‘DSO’), as a neutral party, to act as a central intermediary between CAISO markets and operational transmission dispatch value and customer load optimization across the distribution systems, in consort with third party aggregators relationships with those customers”).

EDF believes that a transition from the Demand Response Auction Mechanism (DRAM) pilot to a permanent program is appropriate – provided that the Commission ensures that the pilot program is structured in a way that allows DR to aid in the achievement of important clean energy goals. Similar to Pacific Gas & Electric, who states they are “supportive of transitioning DRAM to a full program, but believes certain aspects of DRAM should be modified before growing its size and term,”¹¹ EDF believes the Commission needs to determine how best to build a transparent, competitive market before transitioning the DRAM to a full program. However, EDF does not believe that the Commission should accept utility requests for off-ramps if doing so denies would-be pilot participants opportunities to demonstrate innovative DR. While EDF would not support an open-ended pilot, there are clear DRAM pilot limits related to IOU spending and enrollments that will not be met if off-ramps are taken. Though Southern California Edison (SCE) states “any minimum targets should be subject to reasonable economic off-ramps,”¹² it is unclear how SCE defines “reasonable.” The CPUC should not allow SCE and other utilities to use an opaque standard for what they deem to be a reasonable cost in order to deny entry to important DR resources when we are in the midst of a pilot with clear bounds and promising early success.

C. Enhanced data access will be important to build a robust and competitive DR market.

In opening comments, Clean Coalition states “it is essential that utility data be readily accessible regarding capacities and loads of the distribution system with the highest level of

¹¹ *Pacific Gas and Electric Company’s (U-39M) Responses to Questions in Administrative Law Judge Hymes’ May 20, 2016 Ruling*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 21 (filed Jul. 1, 2016).

¹² *Southern California Edison Company’s (U 338-E) Opening Comments to Administrative Law Judge’s Ruling Requesting Responses to Additional Questions in Regard to 2018 and Beyond Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 15 (filed Jul. 1, 2016).

granularity available.”¹³ In addition, OhmConnect believes “third parties and utilities should have access to relevant customer and market data on equal terms.”¹⁴ EDF agrees with these two assertions and similar statements by other parties.¹⁵ In order to have a market that allows third parties and utilities to compete on an even playing field – and maximize customer benefits by aligning customer interests with those of the grid (via a web of economic signals and standards that allow DR to take its proper place at the top of the loading order) – the Commission needs to ensure increased data access and transparency in order to build a competitive market. Otherwise, there is an increased risk of a utility-centric DR market that doesn’t allow for a healthy amount of evolution.

D. The Commission should focus on DR capabilities rather than specific technology.

In its response to the ALJ’s questions, SCE states, “the DRAM should be agnostic to the use of technology, and instead focus on the type, quality and cost of the product that is procured and delivered.”¹⁶ EDF supports the premise that the focus should be upon the performance attributes and capabilities of the DR, rather than a specific technology. As aptly stated in the SCE response, “in fact, SCE is already seeing an array of Seller approaches to delivering the DRAM

¹³ *Clean Coalition Response to Administrative Law Judge’s Ruling Requesting Responses to Additional Questions in Regard to 2018 and Beyond Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 6 (filed Jul. 1, 2016).

¹⁴ *Response of OhmConnect, Inc. to Administrative Law Judge’s Ruling Requesting Responses to Additional Questions in Regard to 2018 and Beyond Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 2 (filed Jul. 1, 2016).

¹⁵ *Comments of the California Energy Storage Alliance on Administrative Law Judge’s Ruling Requesting Responses to Additional Questions in Regard to 2018 and Beyond Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 11 (filed Jul. 1, 2016).

¹⁶ *Southern California Edison Company’s (U 338-E) Opening Comments to Administrative Law Judge’s Ruling Requesting Responses to Additional Questions in Regard to 2018 and Beyond Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 14 (filed Jul. 1, 2016).

product, some of which may have not been anticipated at the time the DRAM Pilot was designed.”¹⁷

In addition to the promotion of technologically agnostic solutions,¹⁸ CAISO states, “to grow into a robust resource, demand response must take advantage of advances in technology and automation, and it must perform in ways that are less impactful to the end-use customer than current demand response programs.” While taking advantage of the available and future advances in technology is useful and should be pursued, it is the overall benefits to customers and the system that must be the overarching goal and pursuit of DR. As well-stated by OhmConnect, “furthermore, technology-specific policies run the risk of unintentionally prejudicing one technology over another. In a competitive market, policies must remain technology agnostic in order to avoid creating distortions.”¹⁹

In this respect the objective of DR development in California ought to follow the lead set in the Distribution Resources Planning (DRP) proceeding where distributed energy resources, including all forms of DR, are evaluated in terms of their of locational-specific costs and benefits; as well, the planning goal is to optimize DER deployment in a way that balances the needs of the customer who owns the DER and the broader grid.²⁰

¹⁷ *Id.*

¹⁸ *California Independent System Operator Corporation Response to Additional Questions in Regard to 2018 and Beyond Demand Response programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 2 (filed Jul. 1, 2016).

¹⁹ *Response of OhmConnect, Inc. to Administrative Law Judge’s Ruling Requesting Responses to Additional Questions in Regard to 2018 and Beyond Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 9 (filed Jul. 1, 2016).

²⁰ *See Assigned Commissioner’s Ruling on Guidance for Public utilities Code Section 769 – Distribution Resource planning*, Order Instituting Rulemaking Regarding Policies, Procedures and Rules for Development of Distribution Resources Plans Pursuant to Public Utilities Code Section 769, R. 14-08-013 (filed Aug. 14, 2014).

- E. *The Commission should ensure that incentives are aligned in order to develop a comprehensive and effective DR market, while also maintaining the loading order.*

DR has tremendous potential to provide services in the form of load management and ancillary services. They need to be properly valued in order to incentivize customers and DR providers to provide these customers. As such, EDF agrees with Joint DR Parties that “it is finally the right time to align the incentives to customers with the needs of the grid.”²¹ This includes incorporating load-modifying DR resources into the California Energy Commission (CEC) forecast – as Opower states, “it is crucial that there be a transparent process by which existing and future LMRs can be embedded in the CEC load forecast.”²² EDF has supported this notion in the past, stating “an adequate forecast by utilities needs to properly take LM DR [load-modifying demand response] into consideration...identifying the capability of LM DR to avoid investment in fossil fuels is an essential part of meeting critical state goals.”²³

Along with those incentives associated with fair valuation in a market-place setting, there needs to be assurance that actions that undermine the loading order aren’t being taken. In particular, EDF believes that there needs to be assurance that fossil-fuel powered back-up generators (BUGs) are not being counted as DR procurement. As Sierra Club appropriately states, a “[clean energy] future will be frustrated unless and until the Commission finally takes action to prohibit the use of fossil-fueled backup engines in demand response programs through a

²¹ *Comments of Comverge, inc., CPower, Enernoc, Inc., and Energyhub (“Joint DR Parties”) on Administrative Law Judge’s Ruling Requesting Responses to Additional Questions in Regard to 2018 and Beyond Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 7 (filed Jul. 1, 2016).

²² *Comments of Opower, Inc., on the Administrative Law Judge’s Ruling Requesting Responses to Additional Questions in Regard to 2018 and Beyond Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 3 (filed Jul. 1, 2016).

²³ *Comments of Environmental Defense Fund on Proposed and Alternate Decisions*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 11 (filed Nov. 05, 2015).

transparent and enforceable compliance regime.”²⁴ Using fossil-fueled BUGs goes against the spirit of DR’s place in the loading order – true prohibition needs to go beyond attestation, which, as Sierra Club correctly points out, is “insufficient,”²⁵ and needs to include penalties for the use of these resources.

F. Appropriate competitive procurement of DR entails compiling a portfolio that provides for the realization of multiple benefits.

As recognized by several parties, DR can provide multiple benefits that should be appropriately recognized and valued. For example, the California Large Energy Consumer’s Association (CLECA) states “DR should work in a coordinated manner with pricing signals provided through rate design, such as time of use rates and dynamic pricing,”²⁶ while Opower believes “integrating demand response with other energy services, such as energy efficiency, can create additional benefits for customers, improve the customer experience, and drive down the “soft costs” related to program implementation, including delivery and marketing cost,”²⁷ and NRG “encourages the CPUC to adopt policies providing incentives and benefits that are not mutually exclusive of one another, but that encourage packaging multiple products or services together that would yield both greater reliability benefits to the grid and achieve exponentially greater cost savings.”²⁸

²⁴*Sierra Club Response to Administrative Law Judge’s Ruling Requesting Responses to Additional Questions in Regard to 2018 and Beyond Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 2 (filed Jul. 1, 2016).

²⁵ *Id.*

²⁶ *Comments of the Large Energy Consumers Association Responding to ALJ Hymes’ Ruling of May 20, 2016*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 3 (filed Jul. 1, 2016).

²⁷ *Comments of Opower, Inc., on the Administrative Law Judge’s Ruling Requesting Responses to Additional Questions in Regard to 2018 and Beyond Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 9 (filed Jul. 1, 2016).

²⁸ *Response of NRG Energy, Inc. to Questions Regarding 2018 and Beyond Demand Response Programs*, Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, R. 13-09-011 at 4 (filed Jul. 1, 2016).

EDF agrees with all the parties above. DR has the ability to provide capacity and ancillary services. In order for those capabilities to be fully offered, providers need to be given assurance that the full suite of values being provided is appropriately compensated.

III. CONCLUSION

EDF thanks the Commission for the opportunity to submit these reply comments.

Respectfully signed and submitted on July 15, 2016.

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